Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Scott A. Rivkees, MD State Surgeon General

Vision: To be the Healthiest State in the Nation

Florida Department of Health in Hillsborough County COVID-19 Super Bowl Surveillance Summary

Authors: Nikki Coble, Danilo Polanco, Michael Wiese, John Vann

Summary Points

- Low numbers of COVID-19 cases (53 in state, and 4 out of state) associated with official Super Bowl events were identified and minimal secondary/household transmission was confirmed from these cases
- In the weeks following the Super Bowl and other events, Hillsborough County COVID-19
 cases and percent positivity were slightly higher in the Tampa Bay Area as compared to
 the rest of the state
- This suggests that most transmission during this surveillance period was likely from private gatherings, in homes, or unofficial events at bars and restaurants.

Background

COVID-19 (COVID) case investigation and surveillance has been occurring in Hillsborough County since the emergence of the SARS-CoV-2 virus in fall of 2019. Over the course of this response, case interviews with COVID cases attempt to gather information on the possible source of the infection and those who may have been exposed. During January and February of 2021, additional focus was placed on gathering information related to the large events surrounding the Super Bowl occurring in Tampa, Florida.

An enhanced daily surveillance of our Hillsborough County Emergency Department Data, select Urgent Care Center Data, and other syndromic systems was conducted from January 22, 2021, to February 8, 2021. This report was shared daily with local leadership and emergency management. Additionally, a weekly summary report of all COVID data in Hillsborough County was shared on each Tuesday during this event, and this report continues to be updated each week. The weekly COVID report is available online here.

Additionally, on February 8, 2021, a call for cases associated with the Super Bowl was posted on the CDC's Epidemic Information Exchange (Epi-X) and information on reporting Florida cases associated with the Super Bowl was sent to all 67 county epidemiology programs throughout Florida.

Statewide, Regional, and County COVID Summary

Over the surveillance period (Jan. 22 to Feb. 24) there were **14,809 COVID cases reported** in Hillsborough County. The average **daily percent positivity of new cases during this period was 7.9%.** As shown in Figure 1, the 7-day rolling case count has **decreased by 42% from 659 new cases to 379 cases per day since Jan. 22**. However, it should be noted that Hillsborough County recently saw record high cases on January 11, 2021, due to holiday travel and gatherings, so **decreases were already being observed when Super Bowl surveillance began**. Additionally, decreases could be partially attributed to the vaccine rollout which began on December 14, 2020. Daily case counts stayed flat during the week after the Super Bowl, while positivity increased.

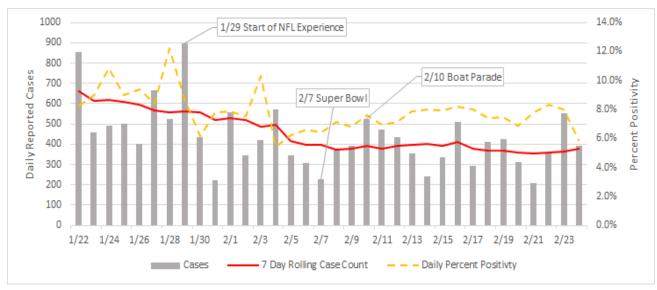


Figure 1: Daily new COVID cases and percent positivity in Hillsborough County residents.

At the start of the **NFL Experience on Jan. 29, the 85+ age group had the highest case rates**. During the Super Bowl Surveillance period, the 65-74, 74-85, and 85+ age groups all saw rates decreasing consistently. During this same period the 25-34, 35-44, and 45-54 age group initially decreased, but began increasing around the time of the Super Bowl. As shown in Figure 2, on **Feb. 24 the highest age group was the 25-34 age group**.

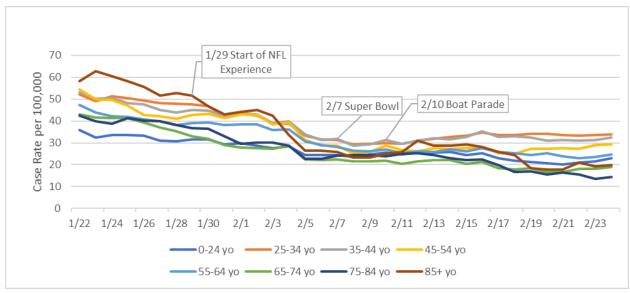


Figure 2: COVID 7-day average case rates per 100,000 population by age group during Jan. 22 to Feb. 23 in Hillsborough County.

During the Super Bowl Surveillance Period the **total number of COVID cases identified in the State of Florida was 260,648.** The statewide percent positivity during this time was 7.3% as compared to Hillsborough County's 7.9%.

Figure 3 shows the daily percent positivity for the state compared with Hillsborough County. Hillsborough County experienced a consistently and slightly higher percent positivity during the two weeks after the Super Bowl, as compared to the state.

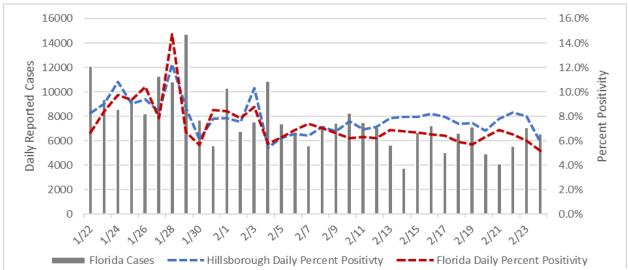


Figure 3: New daily reported COVID cases and percent positivity in Florida compared to the percent positivity identified in Hillsborough County.

Figure 4 displays the share (percentage) of all daily COVID cases Statewide that were in Hillsborough County residents. During Jan. 22 to Feb. 24, an average of **5.7% of Statewide COVID cases were Hillsborough County** residents. This percentage began increasing slightly after the day of the Super Bowl (Feb. 7). This higher percentage of cases **suggests higher levels of COVID transmission in Hillsborough County as compared to the State.**

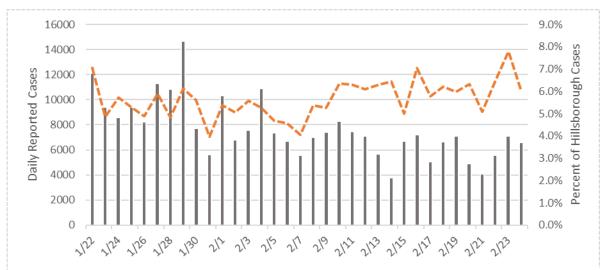


Figure 4: New daily percentage of COVID-19 cases in Hillsborough County compared to the new daily reported cases in Florida.

When comparing COVID case rates per 100,000 population during the Super Bowl surveillance period, it can be seen in Figure 5 that Tampa Bay region (Hillsborough, Pasco, and Pinellas Counties), had rates plateau after Feb. 7 while the state saw continued a declining rate. On Jan. 29 the Tampa Bay area counties were all well below the state case rate. But by Feb. 24 the case rates in the Tampa Bay area have become very similar to Florida's case rates. This suggests that COVID transmission in the region was slightly higher than the state.

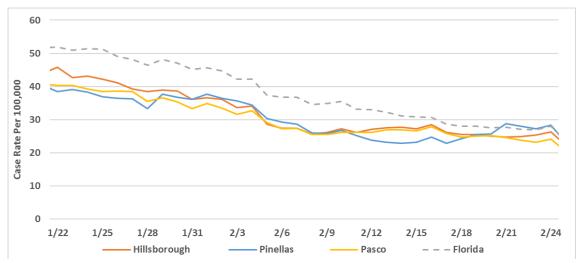


Figure 5: Comparison of COVID 7-day average case rate per 100,000 population for Pasco, Pinellas, and Hillsborough counties to the state of Florida during Jan. to Feb. 24, 2021

COVID Florida Outbreak Module Summary

Florida COVID cases with any suspected association to official Super Bowl events were added to a single outbreak module within the statewide reportable disease database, Merlin. Of the 260,648 Florida COVID cases reported during this surveillance period, 53 (0.02%) reported any association to the Super Bowl or Super Bowl related activities.

These cases were then reviewed and summarized. As shown in Figure 6, after the NFL Experience began on Jan. 29, the Florida Department of Health (DOH) received its **first report of a COVID case whose association to the Super Bowl was a set-up worker** on Feb. 4. After the Super Bowl on Feb. 7, DOH **received multiple reports of COVID-19 cases that attended the game**.

Twenty-one cases mostly likely attended these festivities during their potential infectious period, and 25 cases were potentially exposed by attending these events. Twenty-eight cases report not having any other group setting other than the Super Bowl-related activities. Seventeen cases reported having other group setting activities that go beyond Super Bowl-related activities.

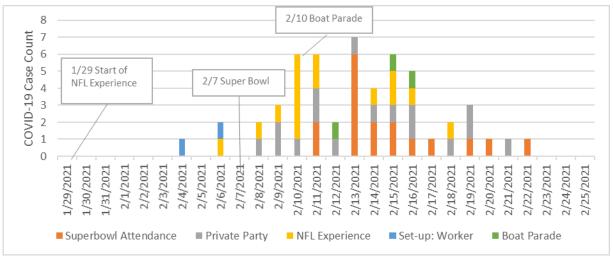


Figure 6: Counts of COVID-19 Cases associated with the Super Bowl Game, NFL Experience, and Social Gatherings (i.e. Private Parties) that occurred within Tampa, FL between Jan. 29 to Feb. 10, 2021

Case investigations identified five household clusters of COVID-19 cases, associated with the index case or whole households' attendance at the Super Bowl or other Super Bowl-related activities. Figure 7 shows when these cases were reported and the type of attendance for the index case.

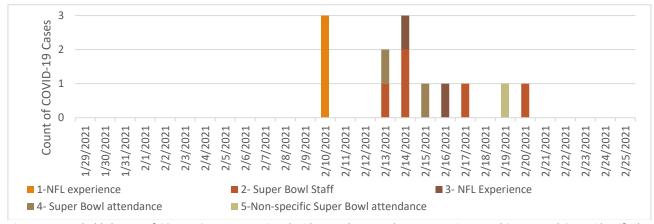


Figure 4:Household clusters of COVID-19 cases, associated with attendance at the NFL Experience and Super Bowl Game identified by the Florida Department of Health classified based on the index cases exposure or attendance location. Each household cluster is grouped by color.

Out of State Summary

Since the EPI-X posting for Super Bowl-related cases on February 8,2021, Hillsborough County was notified of **four confirmed out-of-state COVID cases**. Currently, there have been cases from each of the following states: **Illinois, Michigan, Hawaii and North Carolina**. Every case attended official Super Bowl events, with **three specifically attending the Super Bowl** game on Feb. 7, 2021. Two out of these three were mid-50s, and **present at the event during their infectious period**. Reports indicate that these cases also **traveled while infectious**. Attendance at the NFL Experience at the Tampa Riverwalk, and other pre/post game festivities, were reported by two out of the four cases. None of the reports specified any activity outside of the Super Bowl events where exposure could have occurred.

Authors Comments and Other Considerations

This review of the available data shows evidence of increased community COVID transmission in the Tampa Bay area in the time after the Super Bowl and other Super Bowl events, as compared with the State. Given the small proportion of all COVID cases that were identified with known associations to the official Super Bowl events, most community transmission likely occurred at unofficial Super Bowl gatherings at private homes, restaurants, and bars. Given these sources of transmission, especially in-household gatherings and other private parties, it's likely that that the true number of COVID cases related to this community-wide event is likely

much higher. Pictures and videos from the community gatherings and post-game celebrations show significant and large crowds that further support this conclusion.

Limitations like loss to follow-up, hesitancy from cases to disclose their social histories, and the logistical challenges of cross-jurisdictional case notifications - both intrastate and interstate – certainly result in significant undercounting of the cases related to this event and obscure its impact.

DOH-Hillsborough will continue its COVID case investigations and surveillance for as long as the COVID pandemic continues. Any new information or data related to the Super Bowl and its impact on the Tampa Bay area will be added to our records. Any questions about this report can be directed to:

Michael Wiese, MPH, CPH
Epidemiology Program Manager
Florida Department of Health in Hillsborough County
Michael.Wiese@flhealth.gov

Main: 813-307-8010 Office: 813-559-4197